PTO/SB/08A (08/03) (modified)

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Substitute for form 1449A/PTO

1 of 4

Sheet

(use as many sheets as necessary)

| U.S. Faterit and Traderitark Office, U.S. DEPARTMENT OF COMMERCE |                   |  |  |  |  |
|--|-------------------|--|--|--|--|
| Application Number   | 10/724,223        |  |  |  |  |
| Filing Date  | December 1, 2003  |  |  |  |  |
| First Named Inventor   | Jon Elliott Adler |  |  |  |  |
| Art Unit   | 1649              |  |  |  |  |
| Examiner Name  | John D. Ulm       |  |  |  |  |
| Attorney Docket Number   | 67824.407222      |  |  |  |  |

| <br>    | ,             |
|---------|---------------|
|         |               |
| ILC DAT | ENT DOCUMENTS |

| U.S. PATENT DOCUMENTS         |             |   |              |  |   |  |  |
|-------------------------------|-------------|---|--------------|--|---|--|--|
| *Examiner<br>Inmals           | Cite<br>No. | DOCUMENT NUMBE<br>Number - Kind Code (if kn |              | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages or<br>Relevant Figures Appear |  |  |
| /JU/                          | 1.          | US- 6383778                                 | 05-07-2002   | Zuker et al.                                       |   |  |  |
| /JU/                          | 2.          | US- 6540978                                 | 04-01-2003   | Margolskee et al.                                  |   |  |  |
| /JU/                          | 3.          | US- 7244835                                 | 07-17-2007   | Adler et al.                                       |   |  |  |
| /JU/                          | 4.          | US- 2002/0051997                            | 7 05-02-2002 | Zuker et al.                                       |   |  |  |
| /JU/                          | 5.          | US- 2002/0151052                            | 2 10-17-2002 | Chaudhari et al.                                   |   |  |  |
| /JU/                          | 6.          | US- 2002/0168635                            | 5 11-14-2002 | Zuker et al.                                       |   |  |  |
| /JU/                          | 7.          | US- 2003/0022278                            | 01-30-2003   | Zuker et al.                                       |   |  |  |
| /JU/                          | 8.          | US- 2003/0022288                            | 01-30-2003   | Zuker et al.                                       |   |  |  |
| /JU/                          | 9.          | US- 2003/0040045                            | 02-27-2003   | Zuker et al.                                       |   |  |  |
| /JU/                          | 10          | US- 2003/0054448                            | 3 03-20-2003 | Alder et al.                                       |   |  |  |
| /JU/                          | 11          | US- 2003/0232407                            | 7 12-18-2003 | Zoller et al.                                      |   |  |  |
|                               |             | US-   |              |  |   |  |  |
|                               |             | US-   |              |  |   |  |  |
|                               |             | US-   |              |  |   |  |  |
|                               |             | US-   |              |  |   |  |  |
|                               |             | US-   |              |  |   |  |  |
|                               |             | US-   |              |  |   |  |  |
|                               |             | US-   |              |  |   |  |  |
|                               |             | US-   |              |  |   |  |  |
|                               |             | US-   |              |  |   |  |  |
|                               |             | US-   |              |  |   |  |  |
|                               |             | US-   |              |  |   |  |  |
|                               |             | US-   | 1            |  |   |  |  |
| EXAMINER SIGNATURE /John Ulm/ |             |   |              | DATE CONSIDERED                                    | 10/30/2008  |  |  |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

| Substitute for form 1449/PTO                              |                               |      |             |                                | Application Number   |            | 10/724,223   |   |             |    |  |
|---|-------------------------------|------|-------------|--------------------------------|----------------------|------------|--|---|-------------|----|--|
| INFORMATION DISCLOSURE                                    |                               |      | Filing Date |                                | December 1, 2003     |            |  |   |             |    |  |
| STATEMENT BY APPLICANT  (use as many sheets as necessary) |                               |      |             |                                | First Named Inventor |            | Jon Elliott Adler                                  |   |             |    |  |
|   |                               |      |             |                                | Ar                   | t Unit     | 1649   |   |             |    |  |
|   | (00                           | e as | illally a   | meets as necessal              | (y)                  | Ex         | caminer Name                                       | John D. Ulm   |             |    |  |
| Sheet   |                               | 2 o  | f 4         |                                |                      | At         | torney Docket Number                               | 67824.407222  |             |    |  |
|   | FOREIGN PATENT DOCUMENTS      |      |             |                                |                      |            |  |   |             |    |  |
|   | FOREIGN PATENT<br>DOCUMENT    |      |             |                                |                      |            |  |   |             |    |  |
| *Examiner   | Cite                          |      | Counto      | Country Code Number-Kind Publi |                      | ate        | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>or Relevant Figures Appear | TRANSLATION |    |  |
| Initial   | No                            |      |             | ode (if known)                 | MM-DD-YYYY           |            |  |   | YES         | NO |  |
|   |                               | 12.  | wo          | 00/06592                       | 02-10-2000           | )          | The Regents of the<br>University of California     |   |             |    |  |
| /JU/  |                               | 13.  | wo          | 02/064631                      | 08-22-2002           | 2          | Senomyx , INC                                      |   |             |    |  |
| /JU/  |                               | 14.  | wo          | 01/83749                       | 11-08-2001           |            | Warner-Lambert Co                                  |   |             |    |  |
| /JU/  |                               | 15.  | wo          | 01/66563                       | 09-13-2001           |            | Senomyx, INC                                       |   |             |    |  |
| /JU/  |                               | 16.  | wo          | 03/001876                      | 01-09-2003           | 3          | Senomyx, INC                                       |   |             |    |  |
| /JU/  |                               | 17.  | wo          | 03/025137                      | 03-27-2003           | 3          | IRM, LLC   |   |             |    |  |
| /JU/  |                               | 18.  | wo          | 2005/015158                    | 02-17-2005           | ;          | Senomyx, INC                                       |   |             |    |  |
|   |                               |      |             | apparament in the second       |                      |            |  |   |             |    |  |
|   |                               | _    |             |                                |                      |            |  |   |             |    |  |
|   |                               |      |             |                                |                      |            |  |   |             |    |  |
|   |                               | _    |             |                                |                      |            |  |   |             |    |  |
|   |                               |      |             |                                |                      |            |  |   |             |    |  |
|   |                               | _    |             |                                |                      |            |  |   |             |    |  |
|   |                               | _    |             |                                |                      |            |  |   |             |    |  |
|   |                               |      |             |                                |                      |            |  |   |             |    |  |
|   |                               | _    |             |                                |                      |            |  |   |             |    |  |
|   |                               | _[   |             |                                |                      |            |  |   |             |    |  |
|   |                               |      |             |                                |                      |            |  |   |             |    |  |
| EXAMI   | EXAMINER SIGNATURE /John Ulm/ |      |             |                                | DATE CONSIDERED      | 10/30/2008 |  |   |             |    |  |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

| Substitu  | ite for f   | orm 1449/PTO   | Application Number             | 10/724,223            |          |      |  |  |  |  |
|---|-------------|--|--------------------------------|-----------------------|----------|------|--|--|--|--|
| INIE  | OP          | MATION DISCLOSURE  | Filing Date                    | December 1, 2003      |          |      |  |  |  |  |
|   |             | MENT BY APPLICANT  | First Named Inventor           | Jon Elliott Adler     |          |      |  |  |  |  |
| 31  |             | as many sheets as necessary)   | Art Unit                       | 1649                  |          |      |  |  |  |  |
|   | (400        | at many sheets as nesessary)   | Examiner Name                  | John D. Ulm           |          |      |  |  |  |  |
| Sheet   | 3           | 3 of 4   | Attorney Docket Number         | 67824.407222          |          |      |  |  |  |  |
| OTHER DOCUMENTS - NON-PATENT LITERATURE DOCUMENTS |             |  |                                |                       |          |      |  |  |  |  |
| *Examiner<br>Indials                              | Cite<br>No. | include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposlum, catalog, etc.), date, page(s), volume-issue number(s), publisher, orly and/or country where published |                                |                       |          |      |  |  |  |  |
| /JU/  | 19.         | Database EMBL 'Online!, embl heidelberg; Acc#: Ac062024, June 21, 2000.<br>http://www.ebi.ac.uk/cgi-bin/emblfech?style=html&id=ac062024  |                                |                       |          |      |  |  |  |  |
| /JU/  | 20.         | MONTMAYUER, et al., A Candidate Taste Receptor Gene near a Sweet Taste Locus,<br>Nature <i>Neuroscience</i> , May 2001, pg 492-498, Vol. 4 No. 5, 2001 Nature Publishing Group   |                                |                       |          |      |  |  |  |  |
| /JU/  | 21.         | ADLER, et al., A Novel Family of Mammalian Taste Receptors, Cell, March 17, 2000, pgs 693-702, Vol. 100, Cell Press  |                                |                       |          |      |  |  |  |  |
| /JU/  | 22.         | XIAODONG, et al., Human Receptors for Sweet and Umami Taste, Proceeding of the<br>National Academy of Science, April 2, 2002, pgs 4692-4696, Vol. 99 No. 7, PNAS   |                                |                       |          |      |  |  |  |  |
| /JU/  | 23.         | GUO, et al., Protein Tolerance to Random Amino Acid Change, Proceeding of the National<br>Academy of Science, June 22, 2004, pgs 9205-9210, Vol. 101 No. 25, PNAS  |                                |                       |          |      |  |  |  |  |
| /JU/  | 24.         | NELSON, et al., Mammalian Sweet Taste Receptors, Cell, August 10, 2001, pgs 381-390, Vol. 106, Cell Press  |                                |                       |          |      |  |  |  |  |
| /JU/  | 25.         | NELSON, et al., An Amino-Acid Taste Receptor, Nature, March 14, 2002, pgs 199-202, Vol. 416  |                                |                       |          |      |  |  |  |  |
| /JU/  | 26.         | ALEXANDER, et al., Altering the Antigenicity of Proteins, Proceeding of the National Academy of Science USA, April 1992, pgs 3352-3356, Vol. 89, PNAS  |                                |                       |          |      |  |  |  |  |
| /JU/  | 27.         | BCWIE, et al., Deciphering the Message in Protein Sequences: Tolerance to Amino Acid Substitutions, Science, 1990, pgs 1306-1310, Vol. 247   |                                |                       |          |      |  |  |  |  |
| /JU/  | 28.         | KRAUTWURST, et al., Identification of Ligands for Olfactory Receptors by Functional Expression of a Receptor Library, Cell, December 23, 1998, pgs 917-926, Vol. 95, Cell Press  |                                |                       |          |      |  |  |  |  |
| /JU/  | 29.         | GenBank accession number AL139287, clone RP5-89003, Feb. 12, 2000  |                                |                       |          |      |  |  |  |  |
| EXAMIN  | NER SI      | GNATURE /John Ulm/   | DATE CONSIDERED                | 10/30/2008            |          |      |  |  |  |  |
| *EXAMI<br>citation                                | NER:        | Initial if reference considered, whether or conformance and not considered. Include  | not citation is in conformance | with MPEP 609. Draw I | ine thro | ough |  |  |  |  |

PTC/SB/08B (08/03) (modified)
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

|                       |             |  | ororr allora and mademan  | Olice, O.O. DEI ALTIMENT                      | JI OOWI   | VILLIC |  |  |  |
|-----------------------|-------------|--|---|---|-----------|--------|--|--|--|
| Substitu              | ite for     | form 1449/PTO  | Application Number  | 10/724,223                                    |           |        |  |  |  |
| INIE                  | -OE         | RMATION DISCLOSURE   | Filing Date   | December 1, 2003                              |           |        |  |  |  |
|                       | -           | EMENT BY APPLICANT   | First Named Inventor  | Jon Elliott Adler                             |           |        |  |  |  |
| 31                    |             | se as many sheets as necessary)  | Art Unit  | 1649  |           |        |  |  |  |
|                       | (uc         | e as many sneets as necessary)   | Examiner Name   | John D. Ulm                                   |           |        |  |  |  |
| Sheet                 |             | 4 of 4   | Attorney Docket Number  | 67824.407222                                  | 07222     |        |  |  |  |
|                       |             | OTHER DOCUMENTS - NON-   | -PATENT LITERATURE  | DOCUMENTS                                     |           |        |  |  |  |
| *Examiner<br>Initials | Cite<br>No. | Include name of the author (in CAPITAL<br>item (book, magazine, journal, serial,<br>number(s), publishe  | LETTERS), title of the article (when ap<br>symposium, catalog, etc.), date, page<br>ar, city and/or country where published   | propriate), title of the<br>(s), volume-issue | TRANSLATI |        |  |  |  |
| /JU/                  | 30.         | GenBank accession number AA907022  | e, May 19, 1998   |   |           |        |  |  |  |
| /JU/                  | 31.         | HOON, et al., Putative Mammalian Tasi<br>Distinct Topographice Selectivity, Cell, I  | HOON, et al., Putative Mammalian Taste Receptors: A Class of Taste-Specific GPCRs with Distinct Topographice Selectivity, Cell, February 19, 1999, pgs 541-551, Vol. 96, Cell Press |   |           |        |  |  |  |
| /JU/                  | 32.         | LINDEMANN, B., A Taste for Umami, N<br>3 No. 2   | LINDEMANN, B., A Taste for Umami, Nature Neuroscience, February 2000, pgs 99-100, Vol. 3 No. 2  |   |           |        |  |  |  |
| /JU/                  | 33.         | PERRUCCIO, et al., Possible Role for Gustducin in Taste Transduction in Hirudo Medicinals, Society for Neuroscience Abstracts, 2000, pgs (Abstract) No. 66.15, Vol. 26 No. 1-2 |   |   |           |        |  |  |  |
|                       |             |  |   |   |           |        |  |  |  |
|                       |             |  |   |   |           |        |  |  |  |
|                       |             |  |   |   |           |        |  |  |  |
|                       |             |  |   |   |           |        |  |  |  |
|                       |             |  |   |   |           |        |  |  |  |
|                       |             |  |   |   |           |        |  |  |  |
|                       |             |  |   |   |           |        |  |  |  |
| EXAMIN                | NER S       | SIGNATURE /John Ulm/   | DATE CONSIDERED   | 10/30/2008                                    |           | ·      |  |  |  |
| *EYAMI                | NED.        | Initial if reference considered whether as   | not election in in any factories  | it MPED ood D                                 |           | -      |  |  |  |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.